IN THE CLAIMS:

Please amend Claims 1, 2, 4 and 6-12 as follows. A marked-up copy of Claims 1, 2, 4 and 6-12 showing the changes made thereto, is attached. Note that all the claims currently pending in this application, including those not presently amended, have been reproduced below for the Examiner's convenience.

---

1. (Amended) An exposure apparatus, comprising:

a light source;

an illumination optical system illuminating an original on which a pattern is formed by the exposure light emitted from said light source;

a projection optical system projecting the pattern to a photosensitive object;

a first photodetector, disposed in a portion for receiving light from an optical path between said light source and a portion where the original is placed, said first photodetector being used for monitoring an emission light amount from said light source; and

a processor system changing a proportional coefficient of a target value of an output of said first photodetector and a voltage applied to said light source, in accordance with a change of transmittance of at least an optical element between said light source and said first photodetector.

2. (Amended) An exposure apparatus according to Claim 1, wherein said processing system further performs sensitivity correction of said first photodetector relative to an illuminance on a plane corresponding to a surface of the photosensitive object on the basis of the change of transmittance of at least an optical element between a position where light divided to said first photodetector and a photosensitive object.

3. An exposure apparatus according to Claim 1, further comprising a stage movable in a direction orthogonal to an optical axis of said illumination optical system, on which the original is placed, and a second photodetector disposed near the photosensitive object, wherein said second photodetector detects the exposure light passing through a light transmitting portion of said stage placed at a position different from that of a portion where the pattern is positioned.

4. (Amended) An exposure apparatus according to Claim 1, wherein said processing system changes said proportional coefficient on the basis of at least one of information regarding an illumination extent of said illumination optical system, information regarding transmittance of the original, and a detection result of said first photodetector.

5. An exposure apparatus according to Claim 1, wherein said light source includes one of a KrF excimer laser, an ArF excimer laser, and an F2 laser.

6. (Amended) An exposure apparatus according to Claim 1, wherein said light source has a pulsed laser, said illumination optical system has an ND filter and masking blades for determining an illumination extent, and said processing system changes said proportional coefficient on the basis of information regarding output energy per pulse, an oscillation frequency and oscillation duty of said pulsed laser, a voltage applied to said pulsed laser, a transmittance of said ND filter and the original, and the illumination extent formed by said masking blades.

7. (Amended) An apparatus according to Claim 1, further comprising a second photodetector, disposed near the photosensitive object, having a light receiving surface positioned at the same height as a surface of the photosensitive object,

wherein said processing system

further performs sensitivity corrections of said first photodetector and said second photodetector on the basis of the changes in transmittance of at least an optical element between the position where light divided to said first photodetector and said second photodetector.

8. (Amended) A method for producing devices by use of an exposure apparatus, said method comprising the steps of:

illuminating, with an illumination optical system, an original on which a pattern is formed by exposure light from a light source;

projecting, with a projection optical system, the pattern to a photosensitive object;

receiving light by a first photodetector from an optical path between the light source and a portion where the original is placed;

monitoring, by the first photodetector, an emission light amount from the light source;

changing a proportional coefficient of a target value of an output of said first photodetector and a voltage applied to said light source, in accordance with the change of transmittance of at least an optical element between said light source and said first photodetector; and

developing the photosensitive object with a projected pattern, a circuit device being produced from the developed object,

wherein said illuminating step is performed on the basis of the changed proportional coefficient for the first photodetector.

9. (Amended) A method according to claim 8, further comprising correcting the sensitivity of the first photodetector relative to an illuminance on a plane corresponding to a surface of the photosensitive object on the basis of the change of transmittance of at least on optical element between a position where light divided to said first photodetector and a photosensitive device.

10. (Amended) A method according to Claim 8, wherein said proportional coefficient changing step is performed on the basis of at least one of information regarding an illumination extent of the illumination optical system, information regarding transmittance of the original, and a detection result of the first photodetector.

11. (Amended) A method according to Claim 8, wherein said proportional coefficient changing step is performed on the basis of monitoring results of the change of a ratio of an output of the first photodetector to a voltage applied to the light source.

12. (Amended) A method for exposing an original and for projecting a pattern formed on the original onto a photosensitive object, said method comprising the steps of:

illuminating, with an illumination optical system, the original by exposure light from a light source;

projecting, with a projection optical system, the pattern of the original onto the photosensitive object;

receiving light by a first photodetector from an optical path between the light source and a portion where the original is placed;

monitoring, by the first photodetector, an emission light amount from the light source;

changing a proportional coefficient of a target value of an output of said first photodetector and a voltage applied to the light source, in accordance with the change of transmittance of at least an optical element between said light source and said first photodetector;

wherein said illumination step is performed by using the changed proportional coefficient for the first photodetector.